

J

CENTRAL INTELLIGENCE AGENCY PROGRAM

File CRAFT

Human Source CollectionProject CRAFTISSUE

What level of funding should be approved over the program period to automate the operational and administrative support activities of the CIA at overseas

[REDACTED]

25X1C

REASON FOR ISSUE

The notion of a "paperless station" has been under study by the CIA since late 1976. CRAFT--the Clandestine Record Applications Field Terminal--is a system of "off-the-shelf" hardware and software whose magnetic storage media would be used to reduce a station's paper holdings and permit rapid destruction of sensitive station files and documents.

- o CRAFT has been selected as an FY 1982-FY 1986 program issue for the following reasons:

1. NFIP Resource Investment Required: The deployment of CRAFT to [REDACTED] overseas DDO stations has been recommended by the Program Manager. The scope and timetable carries a multi-year resource commitment of dollars and positions over the program period for procurement and installation, as well as for maintenance, logistics support, and training over the system life cycle.

25X9

[REDACTED]

25X1A

VALUE OF THE ACTIVITY

- o The contribution of CRAFT to US intelligence is the information management support the system is expected to provide to DDO field operations. This will be brought about through the use of standard ADP services supported by the telecommunications facilities of the CIA's

25X1C

[REDACTED]

- o A single automated technology, using standard hardware and based on CIA's experience developing CRAFT, might constitute the most efficient and cost effective approach for the government to follow in coping with the overall overseas post security problem.

CRAFT Concept

- o The CRAFT concept can be broadly described as an application of word processing and data processing, with associated communications support, to enable DDO overseas stations to manage information more effectively. The concept is based upon the following two assumptions:
 1. In the aggregate, DDO station information handling activities are highly similar; therefore, a common set of automated services with standard hardware configurations can be successfully deployed overseas. Hardware maintenance can be directly provided at the station by the communications center staff, and software support can be provided by programmers working at CIA Headquarters.
 2. The Chief of Station (COS), his officers, and administrative staff would use CRAFT as a more efficient and secure way of managing information. Specifically, they would store material in electronic form and use less "hard copy."

Common administrative services include electronic preparation of text and distribution of mail, data base storage and retrieval, inventory control, financial reporting, and personnel management. The principal operational benefits of CRAFT are on-site storage of information in excess of what burn-out time requirements could allow, and the rapid capability provided the field officer for querying station and Headquarters produced computerized counterintelligence and biographic-cryptonym indices.

- 25X1A o The CRAFT concept is now being tested at DDO stations [redacted] 25X1A
- 25X1A [redacted] At these locations, operations, administration, and staff levels closely resemble the "large" and "small" DDO stations overseas where CRAFT would be installed.* The [redacted] tests, which also include the CRAFT development facility at CIA Headquarters, are 25X1A
- scheduled for completion during FY 1981. In FY 1982, CRAFT would be tested at a large overseas station; if successful, the overseas deployment of CRAFT would begin in FY 1983.

[redacted] 25X1

- 25X9 *The CRAFT project proposal defines a large DDO station to consist of [redacted] or more individuals, having separate work spaces for the COS, registry, operations, etc. A small DDO station would consist of at least 2 but less than [redacted] individuals, with the station's information handling functions typically performed in a single area often by a single individual. 25X9

SECRET

- o Four resource alternatives are provided to obtain a DCI decision regarding the rate and mix at which CRAFT configurations are to be deployed overseas by the CIA.
- o Two alternatives are provided to obtain guidance from DCI as to whether a standard automated system, based on CIA CRAFT technology, should be considered for use [redacted] for electronic storage of classified information retained [redacted]

25X1

25X1

DESCRIPTION OF ALTERNATIVES

A. Resource Alternatives:

- o Alternative 1: Deploy CRAFT over the program period following the plan contained in the President's FY 1981 budget and as carried forward

	<u>FY 82</u>	<u>FY 83</u>	<u>FY 84</u>	<u>FY 85</u>	<u>FY 86</u>
\$(M)	[redacted]				
Positions					

25X1A

within the funding level established by DCI guidance in the FY 1982-FY 1986 CIAP. Funds and positions are protected to deploy CRAFT to [redacted] large DDO field stations by FY 1986.

25X9

- o Alternative 2: Accelerate the CRAFT program in accordance with the Program Manager's recommendation (PMRP). Deploy CRAFT configurations to [redacted] small DDO overseas stations by FY 1987. Of the

25X9

	<u>FY 82</u>	<u>FY 83</u>	<u>FY 84</u>	<u>FY 85</u>	<u>FY 86</u>
\$(M)	[redacted]				
Positions					

25X1A

total staff positions shown, 19 new positions are required in FY 1982, reaching 45 new positions in FY 1986. The effort will also require contractor services totaling 160 work years over the FY 1982-FY 1986 program period to support project office activities.

- o Alternative 3: Deploy CRAFT following a revised procurement and installation schedule which automates [redacted] large DDO stations by FY 1987. Defer deployment of remaining 11 large stations to beyond FY 1987. Develop CRAFT as an "in-house" CIA project drawing all necessary support from other agency components.

25X9

	<u>FY 82</u>	<u>FY 83</u>	<u>FY 84</u>	<u>FY 85</u>	<u>FY 86</u>
\$(M)	[redacted]				
Positions					

25X1A

SECRET

- o Alternative 4: Continue development of CRAFT, but defer a decision to deploy system configurations pending completion of a comprehensive overseas testing program.

	<u>FY 82</u>	<u>FY 83</u>	<u>FY 84</u>	<u>FY 85</u>	<u>FY 86</u>
\$(M)					
Positions					

25X1A

ANALYSISo' Resource AlternativesAlternative 1:

- o Alternative 1 would continue the CRAFT project into the program period for the least dollar investment and without the need for additional agency positions or for contractor support. A detailed breakout of the costs associated with Alternative 1, together with the associated deployment schedule, is shown in the attachment at Table 1.
- o Automation of the operational and administrative activities of large DDO stations poses a more difficult problem than does the small station. Given the CIA's long standing objective to transform DDO stations to "paperless" environments, the priority Alternative 1 assigns to large station deployments is understandable. On the basis of station security, however, Alternative 1 does not meet total CIA needs. Resources are not provided for the deployment of CRAFT configurations to small DDO stations. Small stations are located in areas where the threat [] is greatest. At present, for example, the CIA has identified [] DDO stations as highly vulnerable to mob attack. Of these, approximately 15 fall into the small station category.

25X1C
25X9Alternative 2:

- o Under this alternative, CRAFT deployments would proceed at an accelerated rate. For an investment of approximately [] million, a CRAFT Project Office would be established and work begun in FY 1982 to deploy configurations to [] small DDO stations by FY 1987.
- o Alternative 2 is a comprehensive, systematic, approach satisfying the CIA's objectives of achieving paperless station and of minimizing total overall risk of information compromise should a [] be overrun. The total benefit cannot be obtained, however, unless a significant investment of NFIP resources is made. In the attachment, Table 2 provides a breakdown of the cost, procurement, and installation schedule associated with this alternative.

25X1

25X9

25X1C

25X1A o A sizable percentage of accelerated program cost is governed by large station automation requirements. For example: (1) of the \$3.9 million requested in FY 1982 for hardware procurement approximately \$3.0 is tied directly with minicomputers and terminals for large station automation, (2) of the [] total needed by FY 1983 to procure, install, maintain and operate CRAFT, approximately [] is attributable to large station automation, (3) a significant portion of the \$2.9 million needed by FY 1983 for system design is driven by software development and other forms of ADP services to support large station deployment requirements associated with this alternative.

25X1A

Yet, the majority of the DDO large stations to be automated are located in countries where a direct threat to the safety [] does not presently exist. Of the [] large stations under consideration, four are now located in high threat areas. For the remaining [] large stations, therefore, a significant percentage of the resources associated with Alternative 2 would be invested primarily to attain the paperless working environment.

25X1C
25X9

25X9

25X9 o In addition to automation of the stations' administrative and operational activities, the impact of Alternative 2 upon station communications should not be ignored. CRAFT will not save communication spaces, although the operational scenario implies the system will reduce message handling workloads. Under the accelerated CRAFT program, 55 new positions are required through FY 1986 if the CIA Office of Communications is to fulfill its CRAFT related responsibilities. Of these, 30 positions are needed to maintain system hardware at the [] stations. Although contractors might lessen the direct impact of the accelerated program's maintenance requirements upon the Office of Communications, only US citizens who are fully CIA cleared will be allowed to maintain CRAFT hardware and communications software in the field. The positions required to maintain CRAFT configurations overseas might be offset somewhat by the completion of CIA's network modernization program, which will introduce modern communications technology at Headquarters and in the field in support of []. Although CRAFT is not now dependent upon these capabilities, the full potential of CRAFT will not be realized until network modernization is completed in the early 1990s. Through the 1980s, at least, the 30 additional technical positions for CRAFT maintenance would be required. The remaining 25 position increase is associated with logistics support, training, and TEMPEST testing.*

25X1C

Alternative 3

25X9 o Alternative 3 provides sufficient resources for CIA to develop and deploy CRAFT to [] small DDO overseas stations by FY 1987. Lower cost and position requirements reflect the deferral of [] of the 25X9 [] large station CRAFT deployments to beyond FY 1987. A percentage of the resource savings is channeled into accelerated deployment of CRAFT to small DDO stations. This alternative preserves the approved FY 1981 CRAFT plan described in Alternative 1, and accommodates the Program Manager's small station CRAFT deployment requirement described under Alternative 2.

25X9

*The Program Manager commented that much of CRAFT hardware maintenance will be provided by a dedicated Headquarters component assigned to the DDO, and that no increase to overseas staffing will be generated by the CRAFT system.

A cost and deployment schedule for Alternative 3 is shown in Table 3 of the attached ADP Development and Deployment Schedule. CIA undertake CRAFT without contractor support. The CRAFT project proposal assigns about 40 percent of the ADP design, development, and software maintenance requirements to contractors. By stretching out the deployment of large station configurations, the CRAFT Project Office should be able to provide these services in FY 1982 within [] positions now assigned to the CRAFT project. In FY 1983 and FY 1984, additional ADP support positions would be provided to CRAFT as project momentum intensifies. The technical staff positions needed to bring project office strength [] in FY 1983 and [] in FY 1984 could be obtained from CIA ADP development positions assigned to the SAFE Project Office. FY 1983 is identified in the CIAP submission as the point when SAFE will phase out of development and test and into an operational capability.*

25X1

25X1



Alternative 4:

- o If DDO personnel overseas fail to use CRAFT, either because the assumptions underlying the system concept are not correct, or because automation of the station environment is dysfunctional, then the development and deployment of CRAFT would not make sense. Proponents of paperless technology acknowledge that the "human adjustment" is a major obstacle, because machines force individuals to change their work behavior. This problem appears to particularly affect "executives" where the adjustments required could be radical. Thus, the degree to which overseas station operations and administration is a direct function of the managerial style of a particular COS is an important consideration with regard to CRAFT implementation. Although the [] tests will provide insight as to how CRAFT would affect station operations and administrative activities, these results will likely not be available until mid FY 1981. The first overseas

25X1A

*The Program Manager concurs with the costing of Alternative 3, but states at least [] additional staff positions are required over and above the number shown in each fiscal year under Alternative 3.

SECRET

deployment of CRAFT for test purposes is tentatively scheduled in FY 1982, therefore, the actual "on-site" organizational impact of CRAFT will remain unknown for possibly another 24 months. Under Alternative 4, a deployment rate and mix of CRAFT configurations would be determined after the concept has been fully tested in the operating environments where the configurations would be placed. This alternative provides resources for the Program Manager to test CRAFT at a number of small overseas DDO stations in addition to the single overseas large station now planned. At a minimum, the percentage of classified paper that CRAFT would eliminate at all DDO stations should be estimated with confidence before a large investment in the automated technology is made.

B. FY 1983-FY 1987 Guidance Alternatives

- o Alternative 1: CIA should coordinate CRAFT deployment but proceed independently with system design, development, procurement, installation, and operation.

25X1

25X1C

25X1C

Alternative 2:



* The description of CRAFT presented in the attachment is based upon the CIA's DELTA DATA terminal which is now TEMPEST certified. This alternative would not preclude the use of some other TEMPEST certified hardware device should it become available and capable of satisfying mission requirements at lower overall cost.

ATTACHMENT

CRAFT Configurations

- o Two distinct system configurations are associated with the CRAFT concept. To accommodate the classified material retained at the large station and its volume of message traffic, a modular minicomputer based configuration would be used. As shown in Figure 1, a number of Visual Display Units (VDUs)--based on the CIA's standard Delta Data terminal--would be installed throughout the large station's spaces to provide DDO users with access to other VDUs and the minicomputer. The minicomputer would be located in the large station's communications center, which for all [] stations are manned by CIA communicators under the existing [] [] Figure 2 shows the configuration of CRAFT proposed for installation at small DDO stations. At least two VDUs would be used, equipped with floppy disk storage. These are considered sufficient for station files, indices, text and message preparation. The operation of the small station parallels those of the large station but on a much smaller scale. This means disc storage can substitute for the station minicomputer and still give a full range of common automated services to the DDO staff. All [] small stations where this particular configuration would be installed have communication centers manned by the CIA []

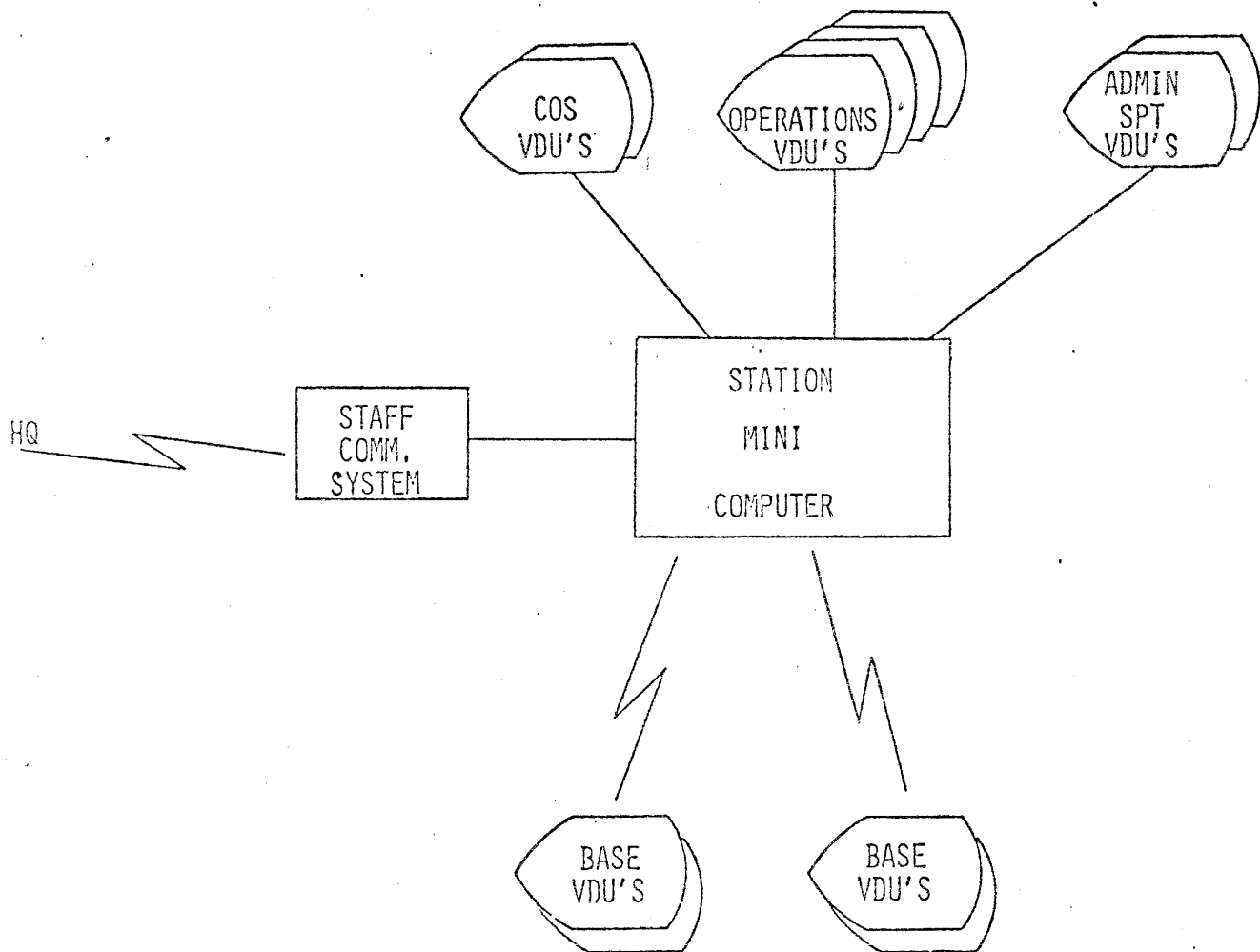
Communications Support

- o Each CRAFT configuration will have an interface to the CIA foreign message network using the satellite (SKYLINK) and HF circuitry provided [] The CRAFT communications interface will initially allow only the exchange of message traffic between the station's minicomputer and Headquarters. The communications center would benefit from CRAFT by avoiding "re-keying" of outgoing messages and by having incoming messages captured in digital form for storage and retrieval.
- o In coordination with the Office of Communication's network modernization effort, CRAFT's initial [] interface is planned for upgrade in the post program period to provide selected stations with "on-line" access to Headquarters information files. Also in the post program period, the DDO anticipates CRAFT could provide automated services to non-official cover officers and agents. Development work in such areas as encryption, compartmentation, and covert communications is required before these services are possible.



SECRET

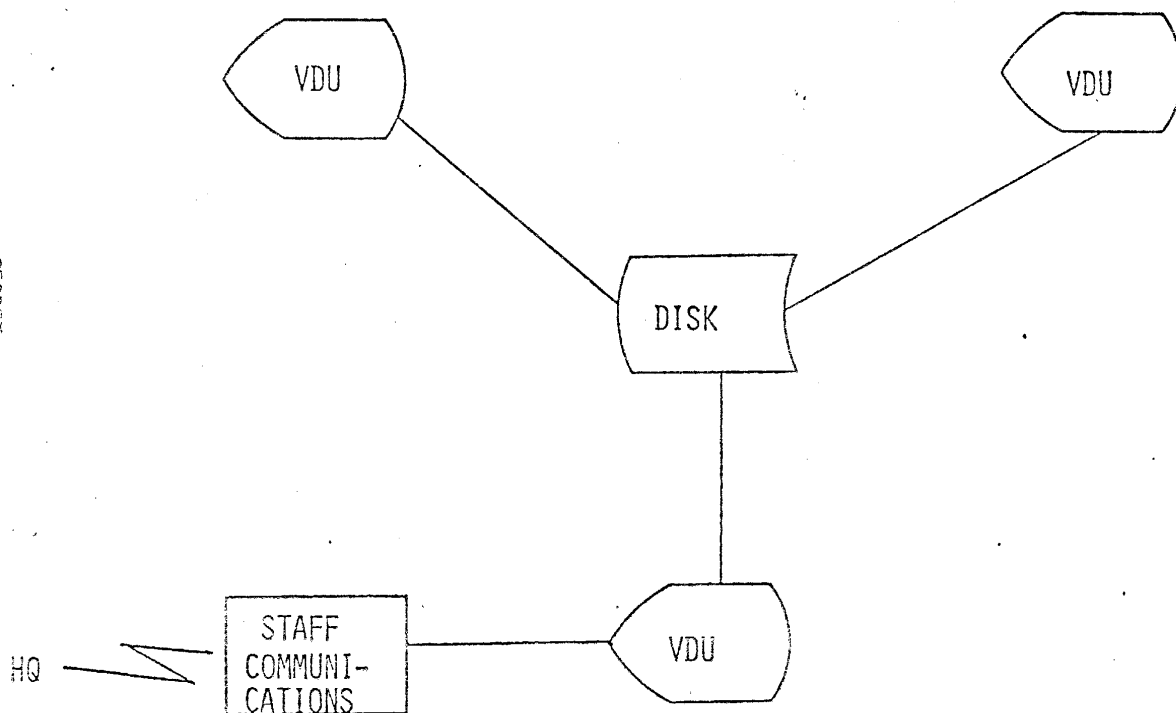
CRAFT LARGE STATION SYSTEM



SECRET

SECRET

CRAFT SMALL STATION SYSTEM



SECRET

SECRET

Next 4 Page(s) In Document Exempt